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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,903	10/10/2001	Hiroshi Akatsuka	027260-493	4461

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EXAMINER

MITCHELL, JASON D

ART UNIT	PAPER NUMBER
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2193

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/972,903	AKATSUKA, HIROSHI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jason Mitchell	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☒ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1220/01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

*[Handwritten signature]*

### **DETAILED ACTION**

1. This application claims priority to JP 2001-088363 filed on 3/26/2001. For priority to be perfected an English language translation must be provided.
  2. As per Applicant's request claims 1, 3-11, and 13-20 have been amended.
- Claims 1-20 are pending in this case.

### ***Specification***

Examiner approves the new title 'EMULATOR AND EMULATION METHOD WITH UPDATABLE CIRCUIT DATA' and it will be applied.

### ***Drawings***

The replacement drawings submitted on 12/13/04 are approved and will be entered.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1-4 and 11-14 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,598,176 B1 to Tago (Tago).**

**Regarding Claims 1 and 11:** Tago discloses an emulator (col. 10, lines 14-20 'estimation apparatus') and emulation method (col. 40, line 35 'A method of estimating') comprising: a receiving means (col. 10, lines 14-20 'external communications interface unit') for receiving circuit design data (col. 10, lines 47-52 'system estimation program', and col. 1 lines 15-21 'the present invention ... provides a user-generated system estimation environment for debugging a system (hardware) generated by a user') used for implementing debugging functions (col. 10, lines 47-52 'system estimation program'); a storage means (col. 10, lines 14-20 'data holding unit') for storing the circuit design data (col. 10, lines 47-52 'system estimation program') received by said receiving means therein; and an emulation means (col. 10, lines 14-20 'the processing unit') for performing emulation according to the circuit design data (col. 10, lines 47-52 'system estimation program') stored in said storage means.

**Regarding Claims 2 and 12:** The rejection of claims 1 and 11 is incorporated; further, Tago discloses that, said receiving means receives a piece of firmware (col. 10, lines 46-56 'system estimation program') that controls operations of said emulation means (col. 10, lines 59-61 'reads the system estimation program ... and operates the microcontroller').

**Regarding Claim 3:** The rejection of claim 1 and 11 is incorporated; further Tago discloses a means for changing a use of a hardware resource (col. 10, lines 59-61) by updating the circuit design data stored in said storage means (col. 10, lines 14-20 'rewritable ROM').

**Regarding Claim 4:** The rejection of claim 2 and 12 is incorporated; further Tago discloses a means for changing a use of a hardware resource (col. 10, lines 59-61) by updating the circuit design data stored in said storage means (col. 10, lines 14-20 'rewritable ROM').

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5-10 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,598,176 B1 to Tago (Tago) in view of US 2001/004226 submitted by Dzoba et al. (Dzoba).

**Regarding Claims 5-7 and 15-17:** The rejection of claims 1-3 and 11-13 are incorporated, respectively; further, Tago does not explicitly disclose that said receiving means receives the circuit design data from a personal computer. Instead Tago discloses receiving the data from an external device (col. 5, lines 3-5 'an interface unit for external communications').

Dzoba teaches that said receiving means receives the circuit design data from a personal computer (par. [0081] 'accessed over ... a Local Area Network'), in an analogous art for the purpose of providing access to the debug component information (par [0079] 'debug component database').

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It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the system taught by Dzoba to download circuit design data stored on a PC to the emulator disclosed in Tago.

The modification would have been obvious because one of ordinary skill in the art would have been motivated to provide the ability to view and edit the circuit design data before transmitting it to the emulator (Dzoba [0082] 'a software representation ... is created').

**Regarding Claims 8-10 and 18-20:** The rejection of claims 1-3 and 11-13 are incorporated, respectively; further Tago does not explicitly disclose that said receiving means downloads the circuit design data from a homepage. Instead Tago discloses receiving from an external device (col. 5, lines 3-5).

Dzoba teaches that said receiving means downloads the circuit design data from a homepage (par. [0081] 'accessed over ... the Internet'), in an analogous art for the purpose of providing access to the debug component information (par [0079]).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the system taught by Dzoba to download circuit design data from a homepage to the emulator disclosed in Tago. Because one of ordinary skill in the art would have been motivated to communicate the circuit design data to the emulator from an external source (Tago col. 10, lines 54-56 'through the external communication interface unit') which might be, geographically separated from the emulator.

### ***Response to Arguments***

A signed and dated 1449 is included with this action.

**7. Applicant's arguments filed 12/13/04 have been fully considered but they are not persuasive.**

On pgs. 9-11 applicant provides a recitation of Tago's disclosure, but does not give any reasons why this disclosed text or the reasons for rejection given in the office action mailed on 09/30/04 would not read on the claimed invention.

In the first and second full paragraphs on page 11, Applicant states "*Tago* merely discloses a data hold unit 1 which stores the state of an internal bus 6 or stores a system estimation program" and "nothing in *Tago* shows, teaches or suggests ... claims 1 and 11". Examiner respectfully disagrees.

In col. 1 lines 15-21 *Tago* states 'the present invention ... provides a user-generated system estimation environment for debugging a system (hardware) generated by a user' clearly indicating his invention consists of more than 'a data hold unit 1'. For example Fig.3 also shows an Interface Unit 5 (receiving) and Processing Unit 2 (emulating) For these reasons, the rejections of claims 1 and 11 are maintained.

Further, because the rejections of claims 1 and 11 are being maintained, the rejections of claims 2-4 and 12-14 are also being maintained.

Still further, and for the same reasons, the rejections of claims 5-10 and 15-20 are being maintained.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. 5,644,515 to Sample et al.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Mitchell whose telephone number is (571) 272-3728. The examiner can normally be reached on Monday-Thursday and alternate Fridays 7:30-5:00.

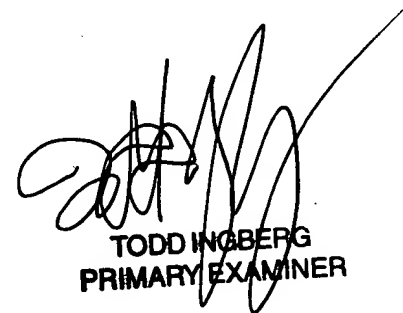
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason Mitchell  
03/22/05



TODD INBERG  
PRIMARY EXAMINER